

UNITED STATES PATENT AND TRADEMARK OFFICE  
**CERTIFICATE OF CORRECTION**

PATENT NO. : 7,502,170 B2  
APPLICATION NO. : 10/523871  
DATED : March 10, 2009  
INVENTOR(S) : Kazuyuki Nakano et al.

Page 1 of 3

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

In Column 3, line 67, please complete the paragraph by inserting --and the above-described light source comprises two kinds of a light source for diffused light and a light source for directional light, and an annular fixing plate, on which the light source for diffused light was allocated on a surface which becomes the above-described object to be detected side and the light source for directional side was allocated on the other surface, was disposed between the above-described diffusion plate and the above-described reflection plate.--.

In Column 4, line 1, please delete the text starting with "In" and continuing up to line 22 ending with "plate".

In Column 4, line 23, please begin the paragraph by inserting --In this illumination apparatus, it is possible to irradiate two kinds of directional light and diffused light to an object to be detected, and therefore, even if the object to be detected is of a mirror surface shape or a concavity and convexity shape, it is possible to carry out appropriate illumination which corresponded to it, and it becomes possible to accordingly carry out stable detection. Furthermore, the directional light which irradiates the object to be detected, is generated by use of an annular light source and an annular reflection plate, and therefore it is possible to realize miniaturization with a simple configuration. Then,--.

In Column 4, line 33, please delete "(3)" and insert therefor --(2)--.

In Column 4, line 42, please delete "(4)" and insert therefor --(3)--.

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In Column 4, line 43, please delete “(2) or (3)” and insert therefor --(1) or (2)--.

In Column 4, line 56, please delete “(5)” and insert therefor --(4)--.

In Column 4, line 57, please delete “(1) through (3)” and insert therefor --(1) or (2)--.

In Column 5, line 1, please delete “(6)” and insert therefor --(5)--.

In Column 5, line 2, please delete “(5)” and insert therefor --(4)--.

In Column 5, line 9, please delete “(7)” and insert therefor --(6)--.

In Column 5, line 11, please delete “(6)” and insert therefor --(5)--.

In Column 5, line 23, please delete “(8)” and insert therefor --(7)--.

In Column 5, line 35, please delete “(7)” and insert therefor --(6)--.

In Column 5, line 41, please delete “(9)” and insert therefor --(8)--.

In Column 5, line 51, please delete “(7)” and insert therefor --(6)--.

In Column 6, line 65, please end the sentence with a period --- after the word “surface” and before “In”.

In Column 7, line 17, please end the sentence with a period --- after the word “detected”.

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Page 3 of 3

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In Column 7, line 41, please delete "thoughholes" and insert therefor --through-holes--.

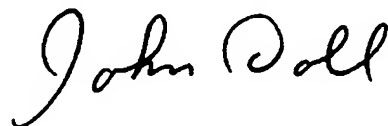
In Column 8, line 10, please delete (second occurrence) "L2" and insert therefor --L1--.

In Column 10, line 24, please end the sentence with a period --.-- after the word "direction" and before the word "In".

In Coloumn 10, line 57, please delete "391" and insert therefor --39--.

Signed and Sealed this

Second Day of June, 2009



JOHN DOLL  
*Acting Director of the United States Patent and Trademark Office*